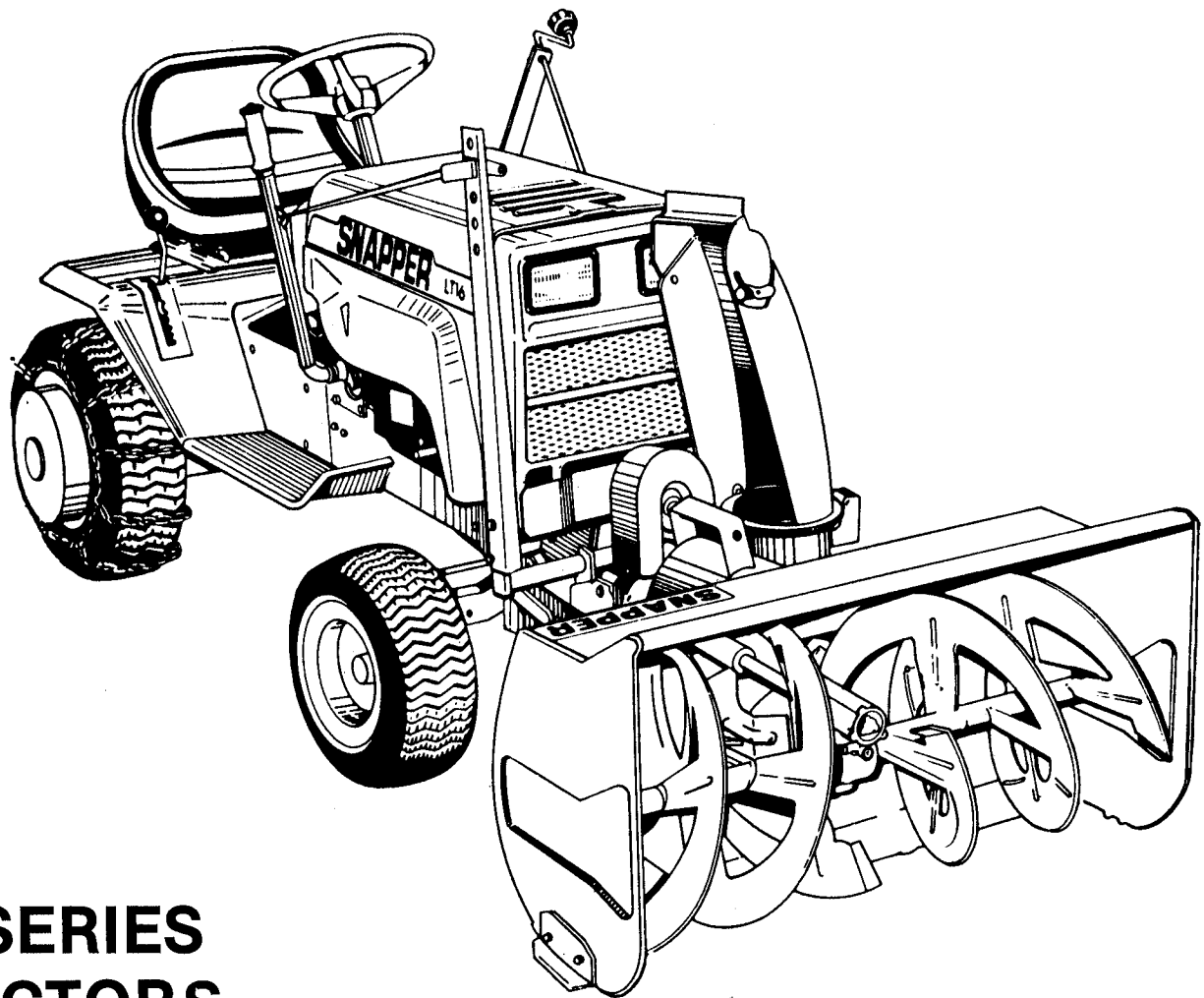
Safety Instructions & Operator's Manual for

SNAPPER #82597

SNOW THROWER ATTACHMENT



for LT SERIES TRACTORS

Thank you for buying the Snow Thrower attachment for your SNAPPER Tractor. This two-stage thrower will do a great job of clearing snow from your drives and walks. This manual covers the recommended procedures for operating the unit as a snow thrower plus detailed instructions for converting the tractor to and from the mower mode as the seasons change. Before operating the snow thrower mode, be sure to read the important safety instructions on the inside page of this manual. When converting back to the mower mode at the end of the snow season, review the important safety instructions and other information in the Tractor Operator's Manual (Snapper).

SNAPPER POWER EQUIPMENT
McDonough, GA • 30253
A FUQUA INDUSTRIES Company

Printed in U.S.A.

MANUAL 1-5516 (9/86)

SAFETY INSTRUCTIONS

WARNING: This powerful snow thrower is capable of amputating hands and feet and of throwing objects causing property damage and personal injury! Failure to observe the following safety precautions could result in serious injury. Read this manual carefully and question your Snapper Dealer if something is not clear. Should the dealer be unable to answer to your satisfaction, send a letter to the attention of the Customer Service Department at Snapper Power Equipment, Post Office Box 777, McDonough, Georgia 30253, or Phone 1-404-947-9141.

PROTECTION FOR CHILDREN

1. DO NOT allow children in area when Snow Thrower is being operated.
2. DO NOT allow pre-teen children to operate the Snow Thrower.
3. DO NOT allow irresponsible teenagers to operate the machine - allow teenager only if exhibiting mature judgment and then only after thorough instruction and under close supervision of an experienced operator.

PREPARATION

1. Read this manual, get to know where all controls are located and practice how to use them before starting for the first time and at the beginning of each season. Pay attention to Decals on the Tractor and Snow Thrower.
2. Wear protective clothing including face mask in extreme cold and boots which will give you maximum footing on slippery surfaces.
3. Before the first snow fall, check the area to be cleared and remove all objects such as doormats, sticks, toys, wires, rocks, etc., which could be hurled or jam the snow thrower.
4. Survey the area to be cleared beforehand and plan where snow is to be blown. Be prepared to disengage blower or to change deflector quickly to discharge away from windows, cars, buildings and doorways to avoid property damage or personal injury from hurled objects.
5. Adjust the collector housing height by adjusting skid shoes to clear rough spots or gravelled surfaces before starting.
6. Handle fuel with care. Store only in approved gasoline container. Move machine outdoors where fumes can be safely dissipated before filling tank. Never add fuel when engine is running. Allow cooling off period after stopping to prevent spilled fuel from igniting on contact with hot engine parts.

OPERATIONAL PRECAUTIONS

1. Before starting, make visual check to make sure blower housing is clear and all guards and shields are in place and tight.
2. Warn everyone in advance to stay clear of area but keep especially watchful for children and pets darting into area while operating.
3. Start engine only when exhaust fumes can be dissipated, allow brief warm-up period, practice operation of controls outside before putting the machine to work.
4. Start in slow speed and adjust traction speed to insure safe operation.
5. Transport unit with blower clutch disengaged and activate only when snow is to be cleared. Set deflector to discharge desired distance beforehand.
6. Adjust traction speed slow enough to avoid overloading capacity resulting in clogging of the blower housing.
7. Should the blower become clogged, disengage traction and blower clutch controls and, as an additional precaution, stop the engine before attempting to unclog the collector and impellers.
8. If you strike a hard object and break the auger shear pin, stop the engine before inspecting for damage, and/or replacing the shear pin.
9. Stop the engine if unit starts to vibrate excessively as this normally indicates mechanical problems.
10. Avoid clearing steep slopes and keep away from drop-off areas where machine could tip over. Clear snow up and down slopes whenever possible.
11. Stop the engine and remove the key whenever you leave the unit unattended to eliminate the possibility of children or untrained adults attempting to operate the machine.

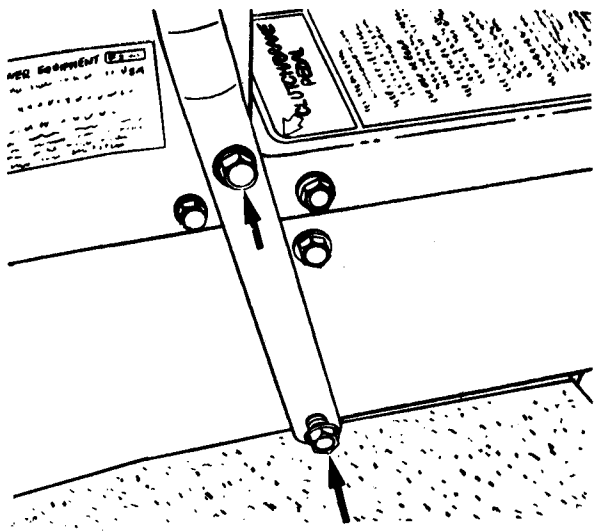


FIGURE 1

INSTALLATION INSTRUCTIONS

The following is the recommended procedure for the initial installation of the snow thrower attachment on a Snapper LT series tractor. Tools required are: a pair of pliers, 1/4" square nut wrench and 5/16, 7/16, 1/2, 9/16, 3/4" open end wrenches.

STEP 1: Remove the mower and mule drive from the tractor. Save hardware for reassembly.

STEP 2: Install the chute crank brace to the left side of the tractor as shown in figure 1 by removing the two existing bolts from the frame and replacing them with two 5/16x1-1/2" bolts from the hardware bag.

STEP 3: Install the guadrant lockout plate on the implement lift lever plate as shown in figure 2.

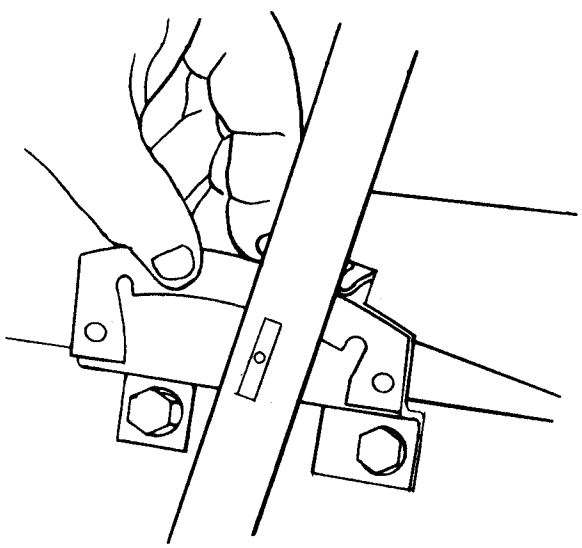


FIGURE 2

NOTE: Some early model lawn tractors will not have square holes in the lever plate for the carriage bolts. On these, align top of lockout with the top of the lever plate, mark hole centers and drill two 5/16" holes thru the lift plate. Secure with two 1/4x5/8 flat head carriage bolts and 1/4 hex nuts.

STEP 4: Remove hood and install the heat deflector with two 1/4-20x5/8 flat head carriage bolts, flat washers and locknuts. (Figure 3) Do not reinstall hood at this time.

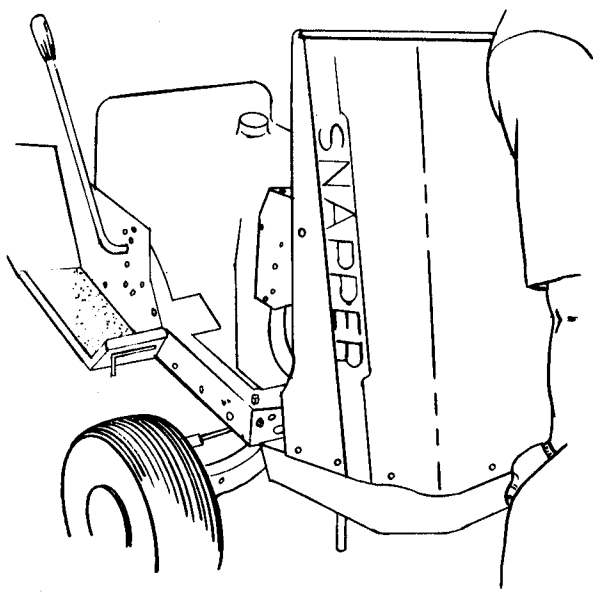


FIGURE 3

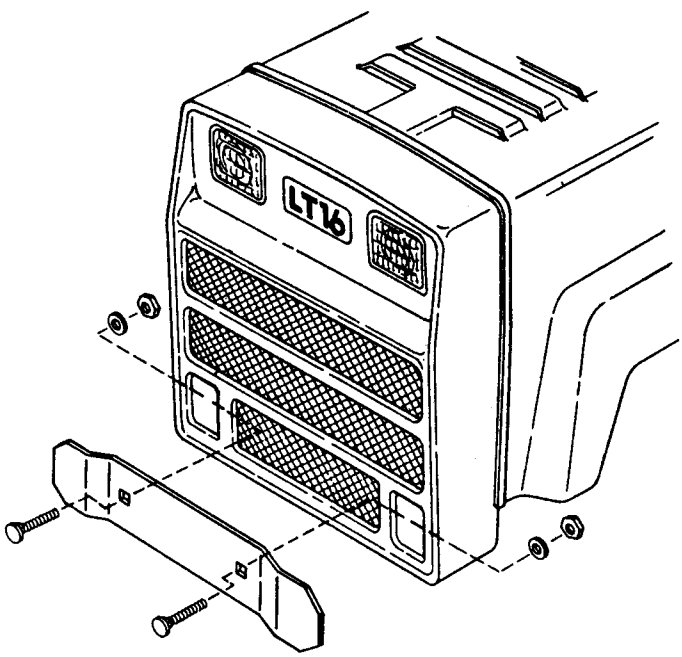


FIGURE 3

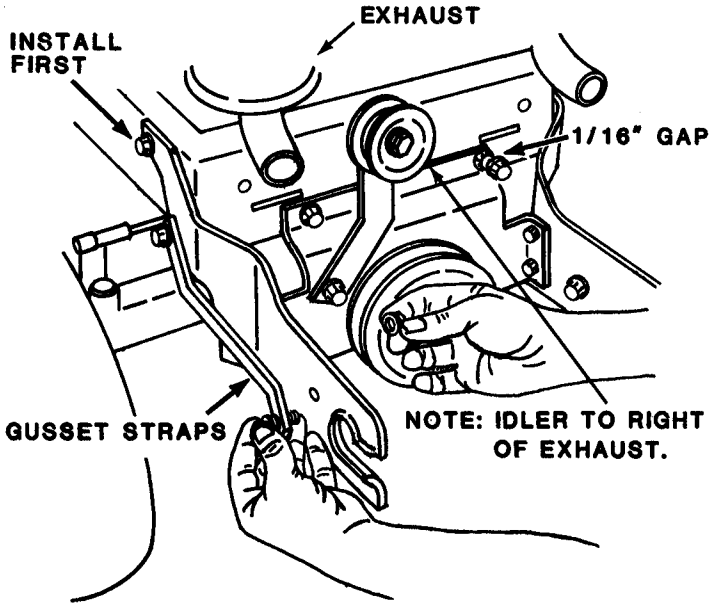


FIGURE 4

STEP 5: Attach hitch and pulley assembly to frame of tractor using two 3/8-16x7/8" capscrews in upper side holes first. (For easier installation) NOTE: Delay tightening capscrews until other capscrews are in their respective holes of this assembly. Also, idler pulley should be to the right of muffler exhaust pipe. Insert another 3/8x7/8" capscrew into front left hole of assembly. Secure a 3/8 hex flange locknut onto 3/8-16x1-1/4" capscrew (with flange away from head of capscrew) as shown in figure 5 and turn down towards the head until 1/16" space is between nut and head of capscrew. Insert bolt-nut combination into front right hole of assembly. (Maintaining the 1/16" gap.) (Figure 4)

STEP 6: Install gusset straps to hitch and pulley assembly using 3/8-16x7/8" capscrews as shown in figure 4. Tighten all capscrews and nuts of the hitch and pulley assembly.

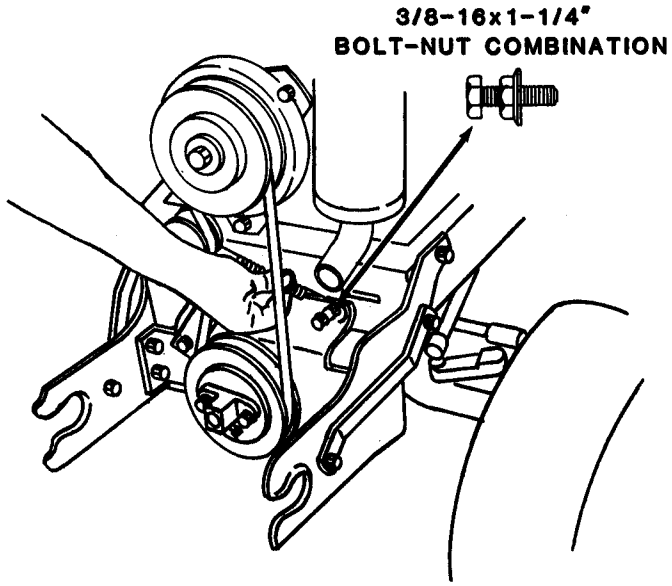


FIGURE 5

STEP 7: Install V-belt around pulleys and connect spring, from hardware bag, to idler pulley arm and hook onto bolt-nut combination. (Figure 5)

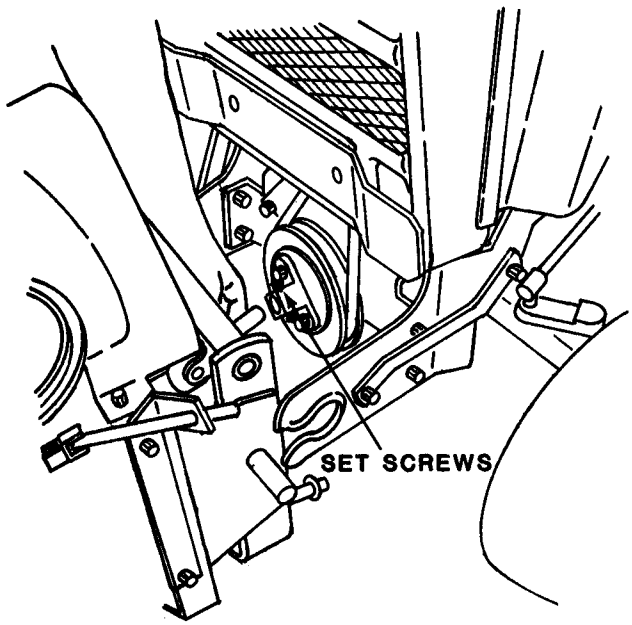


FIGURE 6

STEP 8: Reinstall hood. Install snow thrower head by rolling tractor into head, at the same time, align keyslot of drive shaft with key in coupling. (Figure 6)

STEP 9: Install hitch bushings as shown in figure 7 and secure with hairpins. **Caution:** Securely tighten setscrews on coupling to anchor drive shaft.

STEP 10: Insert chute crank through crank brace and connect it to the worm gear shaft and "U" joint with cotter pin.

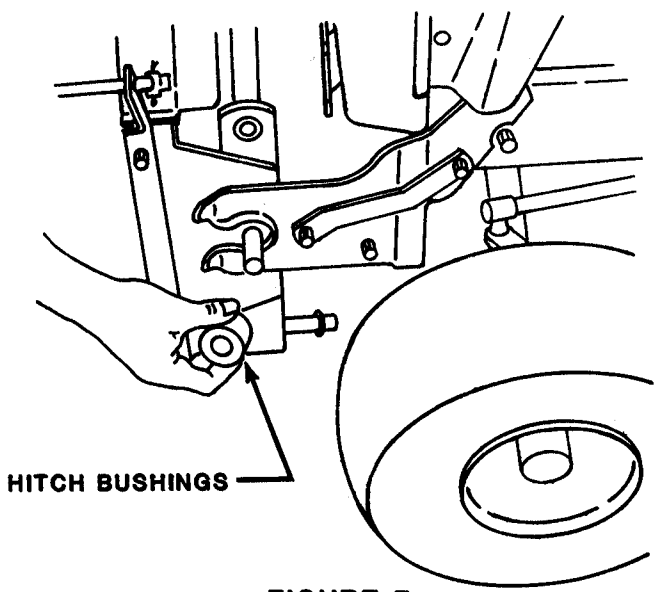


FIGURE 7

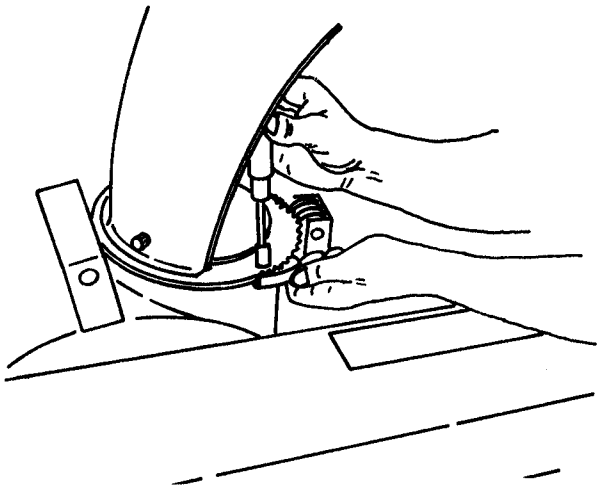


FIGURE 8

STEP 11: Install snow chute with plastic retainer (two plastic retainers are already installed). Be sure to install retainer in the same position as the other two retainers. Secure with two #10-24x5/8" self-tapping screws (Figure 8).

STEP 12: Install lift arm assembly using two 1/2-13x1" capscrews and hex nuts as shown in figure 9. Connect lift rod, of lift arm assembly, to implement lift lever on tractor and secure with cotter pin. (Figure 10)

NOTE: Adjustment of the lift arm pressure may be needed. Loosen hex nuts, at the threaded end of lift rod, and adjust the lift arm assembly to raise or lower the snow thrower head. Different ground terrain may require more adjustment. Also, height of snow thrower can be changed by removing wing-nut and inserting lift rod into different holes for different terrains.

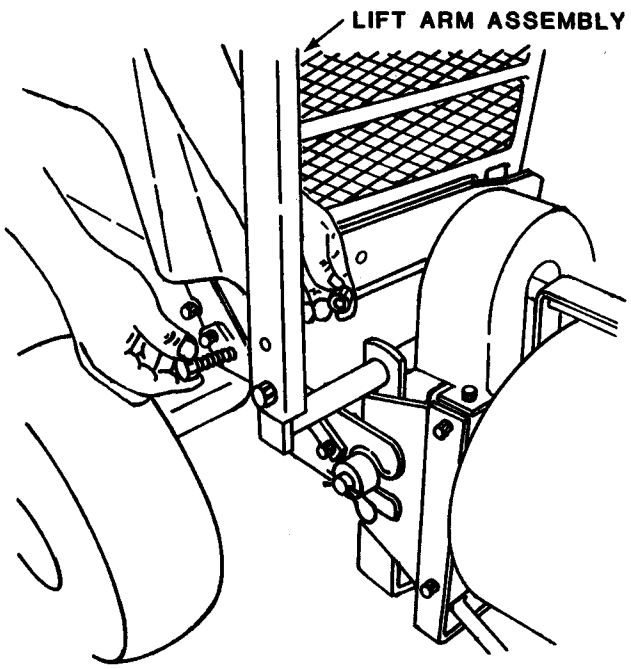


FIGURE 9

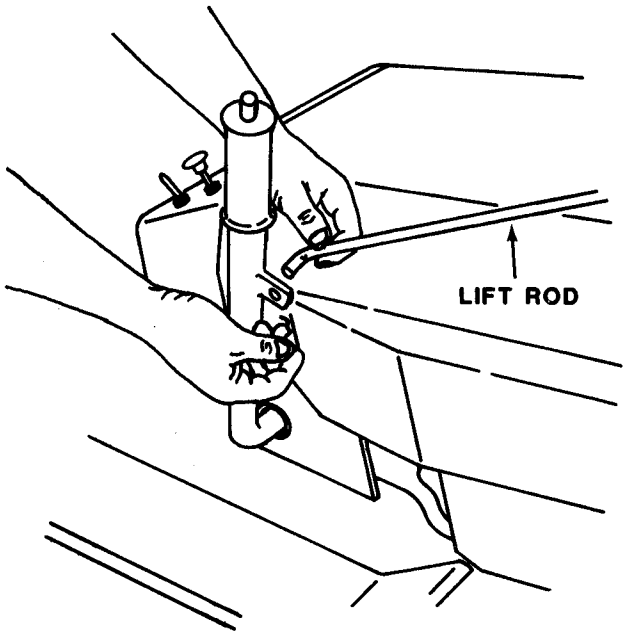
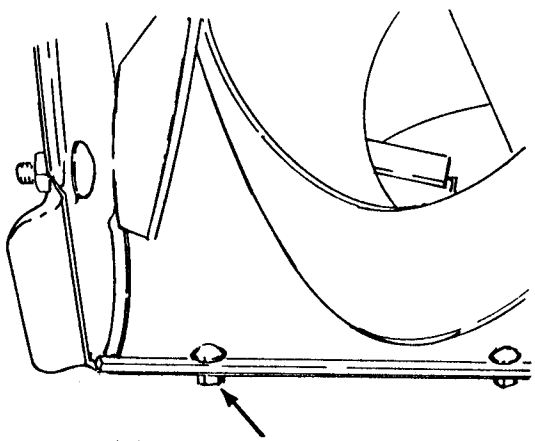


FIGURE 10



LOOSEN CARRIAGE BOLTS
& SHIFT SCRAPER BLADE

SCRAPER BLADE

Your Snow Thrower is equipped with an adjustable scraper on the inside leading edge of the collector housing. Its purpose is to prevent wear and damage to the housing. When the scraper itself wears down close to the lower edge of the edge of the housing, loosen the seven nuts on the backside of the housing and slide the scraper downward. Retighten the seven nuts after repositioning. Replace the scraper if badly nicked or when it no longer can be adjusted below the edge of the housing.

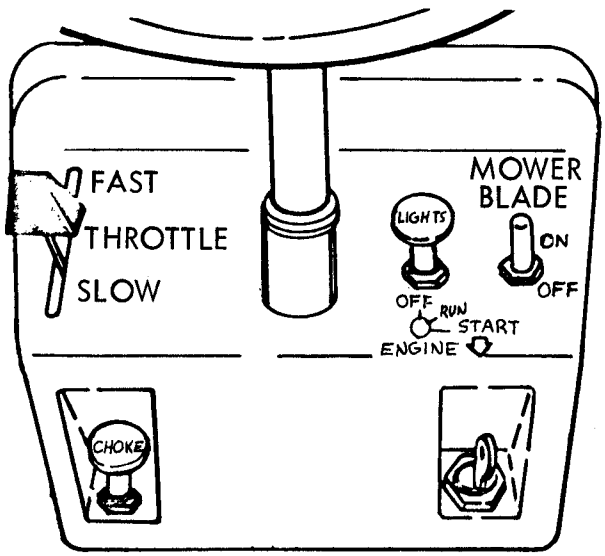
RECOMMENDED OPTIONS

Tire chains and wheel weights are recommended for improved traction under most conditions. These are available from your Snapper Dealer. For the wheel weights, order kit #6-0517. Order kit #6-0609 for the chains.

OPERATION

Make sure that each person you authorize to operate your Snow Thrower reads this manual beforehand and pays particular attention to the safety precautions on the inside front cover and to the warning decals on the machine.

Know how to stop the Tractor and Snow Thrower quickly in preparation for possible emergency situations. Forward motion of the Tractor is stopped by depressing the CLUTCH/BRAKE pedal with your left foot. The Snow Thrower auger and impeller are stopped by switching the BLADE toggle switch on the tractor dash to OFF. The other Snow Thrower controls involve the implement lift lever and the chute crank control. The setting of the discharge chute deflector cap helps determine how far the snow will be thrown. Refer to the Tractor Operator's Manual for specific details involving operation of the tractor.



PRE-START PROCEDURE

- ENGINE LUBE: Check level and add oil, if needed, of weight and grade specified in the Engine Owner's Manual.

- FUEL SUPPLY: After making sure unit is safely away from ignition producing appliances and in area where gasoline fumes can be dissipated, fill fuel tank with gasoline specified in Engine Manual

- CHECK TIRES and bring pressure up to 12-15 psi without tire chains or 15-20 psi with chains.

- CHECK UNIT to make sure guards and shields are in place and tight. Also check blower housing to insure that it is free of all objects.

- RESET RUNNERS to suit area to be cleared. Lower skid shoes to provide greater clearance over gravel or raise the shoes for smooth, paved surface. Refer to skid shoe adjustment procedure for details.

- SET DEFLECTOR CAP to throw snow desired distance. Loosen wing nut, push cap edge back even with the chute to throw snow up to 30 feet away or pull cap all the way out to throw snow only about three feet. Retighten the wing nut after repositioning cap. Always stop the snow thrower and engine before repositioning the cap.

OPERATIONAL PROCEDURES

Whenever possible, check the area to be cleared before the first snow fall to plan the snow removal procedure. Observe and make mental note of the location of curbings, ditches, pipes or other obstructions which might be buried in snow. Try to blow the snow away in the same direction the wind is blowing. The optional wheel weights and chains as described on the back page of this manual are recommended for maximum wintertime traction.

TRANSPORTING: Pull back on implement lift lever to latch header in transport position, depress clutch/brake pedal, shift axle into HI or LO, shift speed selector to #1 foreward (or R for reverse) then release clutch brake pedal and drive to site.

THROWING SNOW: After arriving at area to be cleared, stop forward motion, shift speed selector to N and proceed as follows.

1. Adjust chute to discharge snow in desired direction. Turn the crank clockwise to discharge to the right or counter clockwise to discharge left.

2. Pull back on the implement lift lever and depress the lift latch button with your thumb then move the lever foreward and lower the unit until it rests on the skid shoes.

3. Set throttle control in fast position.

4. Pull the mower blade switch outward and move upward to ON position. NOTE: Blower auger blades and impeller will begin rotation when the switch is turned ON.

5. To clear snow, depress the clutch/brake pedal, shift axle into LO range, shift speed selector to #1 speed, release the clutch/brake pedal and move slowly foreward into the snow. Reset the ground speed higher as needed to suit snow conditions.

6. If the blower unit lifts up in heavy snow, push the lift lever all the way foreward until the handle latches in the full down position. This shifts the blower out of the "float" position into solid contact with the surface. Use this feature only in extra heavy snow. Under normal conditions, depress the lift latch to allow the blower to return to "float".

SERVICE & ADJUSTMENTS

SERVICE ASSISTANCE

Contact your Snapper Dealer for replacement parts or for assistance when service is needed to keep your Snow Thrower in top condition. To obtain the correct parts or advice for your particular model, always report the model and serial numbers as found on the nameplate attached to the frame.

LUBRICATION SERVICES

The Snow Thrower unit has two grease fittings on the augers and two on the auger shaft bearings as shown in Figure 11. The unit also has a lube check-point at the front of the auger-impeller gearbox shown in Figure 12. Service these and the other general lube points as follows:

GEARBOX LUBE: AFTER EACH 25 HOURS of operation (or each time the engine oil is changed) remove the plug at the front of the gearbox and check the oil level. With the Thrower on a flat, level surface, the oil should be even with the lower edge of the check hole. Use an oil can containing the same weight and grade of oil specified for the engine crankcase to bring the level just up to the point of overflowing from the hole. Reinstall the oil plug after servicing.

AUGER LUBRICATION: ONCE EACH YEAR, (preferably at the end of the winter season), remove the two shear bolts, apply grease to the fittings then spin the auger to work the grease out along the auger shaft. Continue greasing and spinning augers until grease appears at both ends of each auger tube. Reinstall shear bolts and nuts after servicing. This procedure will prevent the auger shaft from rusting to the auger tube.

BEARING LUBE: ONCE EACH YEAR, apply one or two shots of grease from gun to the bearing grease fittings located at the ends of the auger shaft just inside the blower housings.

GENERAL LUBE POINTS: ONCE EACH YEAR, (or more often if rust formation hampers operation), spread a light coating of grease on the chute crank worm and on the underside of the gear ring at the base of the discharge chute. Also squirt oil from oil can into the gap between the inside of the discharge chute and the outside of the discharge flange of the blower housing. Crank chute back and forth while oiling to spread lubrication evenly over both surfaces.

SKID SHOE ADJUSTMENT

The skid shoes should be lowered to raise the blower housing to clear gravelled or rough surfaces, or adjust until almost even with the edges of the housing to allow clearing down to smooth paved surfaces. Note that the skid shoes can be installed upside down to cut thru icy or hard-packed surfaces. To adjust the skid shoes, block under the lower edge of the blower housing, loosen the retaining nuts and slide shoe up or down to desired height then retighten the nuts. Set both skid shoes in the same position.

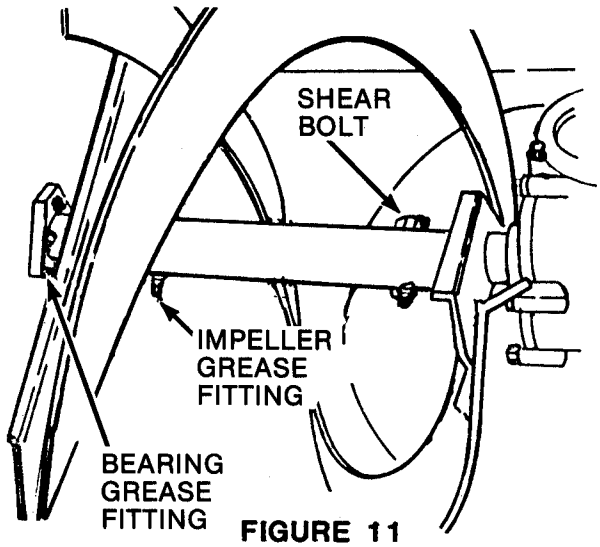


FIGURE 11

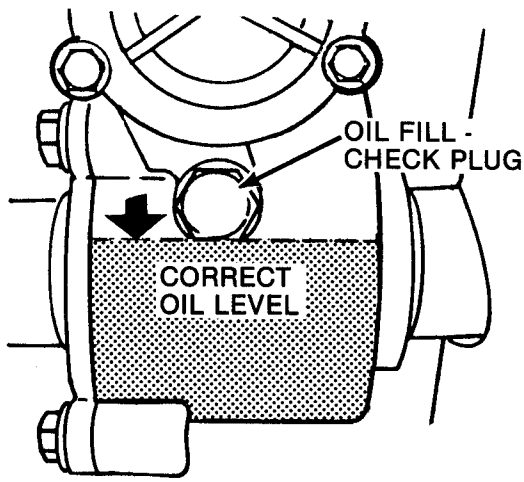
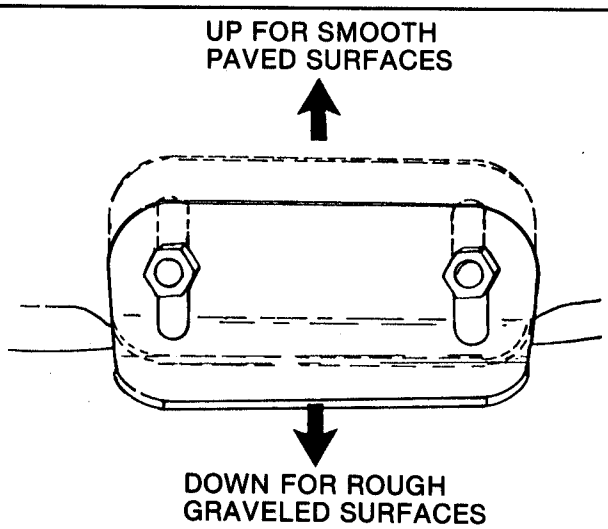


FIGURE 12



NOTE: Adjustment of the lift arm pressure may be needed. Loosen hex nuts, at the threaded end of lift rod, and adjust the lift arm assembly to raise or lower the snow thrower head. Different ground terrain may require more adjustment. Also, height of snow thrower can be changed by removing wing-nut and inserting lift rod into different holes for different terrains.

MANUFACTURER'S 2 YEAR LIMITED WARRANTY

For two (2) Years from purchase date for the original purchaser's residential, non-commercial use [ninety (90) days from purchase date for the original purchaser's commercial, rental, or other non-residential use], SNAPPER POWER EQUIPMENT, through any SNAPPER dealer will replace, free of charge, any part or parts found upon examination by the factory at McDonough, Georgia, to be defective in material or workmanship or both.

All transportation cost incurred by the purchaser in submitting material to a SNAPPER dealer for replacement under this warranty must be borne by the purchaser.

This warranty does not apply to parts that have been damaged by accident, alteration, abuse, improper lubrication, normal wear, or other cause beyond our control.

There is no other express warranty.

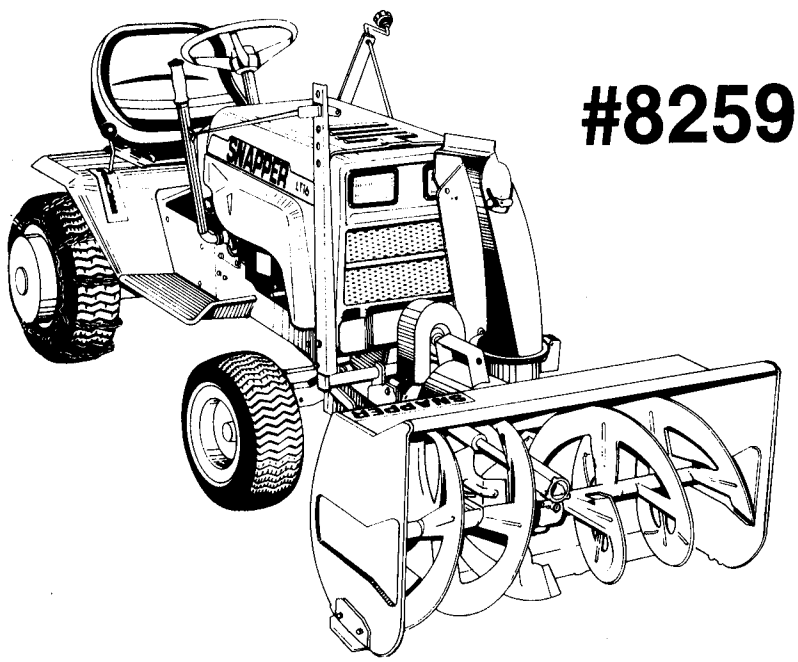
Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to two (2) years from purchase date for the original purchaser's residential, non-commercial use [ninety (90) days from purchase for the original purchaser's commercial, rental or other non-residential use], and to the extent permitted by law any and all implied warranties are excluded. This is the exclusive remedy. Liabilities for consequential damages, under any and all warranties are excluded.

Some states do not allow limitations on how long an implied warranty lasts,or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

WARNING: THE USE OF REPLACEMENT PARTS OTHER THAN GENUINE SNAPPER PARTS MAY IMPAIR THE SAFETY OF SNAPPER PRODUCTS AND WILL VOID ANY LIABILITY AND WARRANTY BY SNAPPER ASSOCIATED WITH THE USE OF SUCH PARTS.

IMPORTANT: Please fill out the attached SNAPPER Product Registration Card immediately and mail to: SNAPPER POWER EQUIPMENT, McDONOUGH, GEORGIA 30253



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